REMARKS

A new abstract has been supplied.

The claims remaining in the application are claims 1 and 4-8.

With respect to the prior art rejections under 35 USC § 102, all of the claims now correspond to original claims 3-8 which were indicated as being free of the prior art.

With respect to the rejections under 35 USC § 112 and the objections, the following comments apply.

In a telephone interview with the examiner it was agreed that "or" terminology is permitted by MPEP § 2173.05(h)(II). Applicants have considered the claims in terms of which type of terminology, i.e., Markush group or "or", would be editorially preferable in each occurrence, and have amended the claims accordingly.

"O" and "S" no longer appear as a value for "A."

Mole ratios are now recited.

The fact that the compound of formula II is different from that used in step a) in claim 8 has now been indicated in both appropriate places.

The use of the expression "substituted or unsubstituted" broadly is permitted by precedent. *In re Hansen*, 141 USPQ 803, 807 (CCPA 1964), *Ex parte Breuer*, 1 USPQ2d 1906 (BPAI 1986).

The types of heteroatoms generally considered to be feasible by organic chemists of ordinary skill in the art are well known and the use of that expression does not lead to indefiniteness. *In re Kamal*, 158 USPQ 320, 323 (CCPA 1968). See also

Ex parte Breuer, *supra*. The heteroatoms here in question are not critical to the function of the compounds or the process claimed. It has been held in precedential decisions that broad inventions can be defined only by broad claims. See, merely for example, *In re Sarett*, 327 F.2d 1005, 141 USPQ 474, 486 (CCPA 1964).

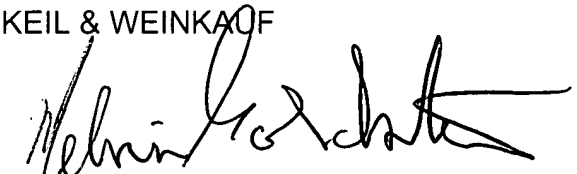
In light of the foregoing amendments and remarks, it is believed that with respect to the claims remaining in the application, all of the rejections of record have been obviated, and allowance of this application is respectfully requested.

A check in the amount of $110.00 is attached to cover the required one month extension fee.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



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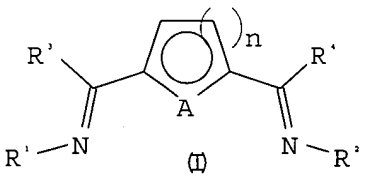
COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

1. (currently amended) A compound of the formula (I)



where the symbols have the following meanings:

A is a nonmetal selected from ~~among N, S, O~~ the group consisting of N and P,

R^1 is a radical of the formula NR^5R^6,

R^2 is a radical of the formula NR^5R^6 ~~or NR^7R^8, alkyl, aryl or cycloalkyl~~,

R^5 and R^6 together with the N atom form a ~~5-, 6- or 7-membered ring in which one or more of the -CH- or -CH_2- groups may be replaced by suitable heteroatom groups and which may be saturated or unsaturated and unsubstituted or substituted or be fused with further carbacyclic or heterocarbacyclic 5- or 6-membered rings which may in turn be saturated or unsaturated and substituted or unsubstituted,~~ pyrrole radical or a radical derived from pyrrole substituted in the 2 and 5 positions by C_1-C_6-alkyl groups which may be linear, branched or substituted by heteroatoms, and/or by aryl groups which may be unsubstituted or in turn

substituted by heteroatoms or C_1-C_6-alkyl groups which may be heteroatom-substituted and

delete R^7 and R^8 are, independently of one another, alkyl, aryl or cycloalkyl radicals, and

R^3, R^4 are, independently of one another, H or alkyl, aryl or cycloalkyl radicals, and

n is 1 or 2.

2. (canceled)

3. (canceled)

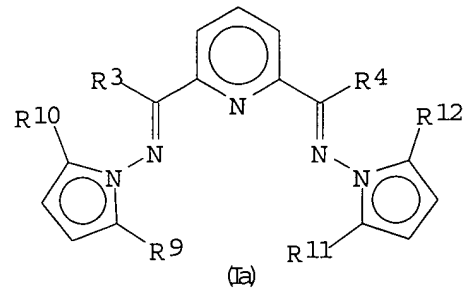
4. (currently amended) A compound as claimed in claim 1, wherein the pyrrole radicals or radicals derived from pyrrole are substituted in the 2 or 5 position by electron-withdrawing radicals selected from ~~among~~ the group consisting of

- halogen,
- NO_2, and
- sulfonates selected from ~~among~~ the group consisting of
- SO_3R^*,
- $SO_3SiR^*_3$ and
- SO_3- $(H\text{-}NR^*_3)^+$, and
- -trihalomethyl,

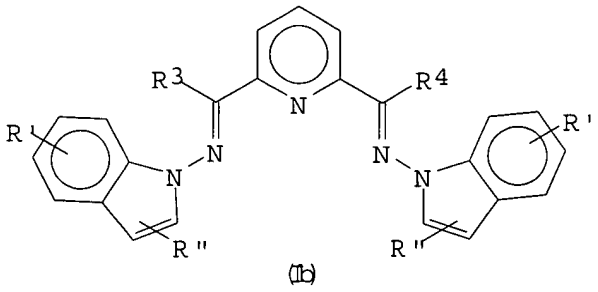
where R^* may be identical or different and are selected from ~~among~~ the group consisting of H, C_1-C_{10}-alkyl, C_6-C_{20}-aryl and C_5-C_8-cycloalkyl.

5. (previously presented) A compound as claimed in claim 1, wherein, in the formula (I) of claim 1, A = N and n = 2.

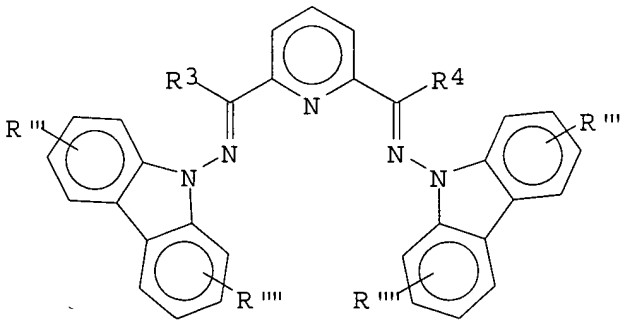
6. (original) A compound as claimed in claim 5 which corresponds to one of the formulae (Ia), (Ib), (Ic) and (Id):



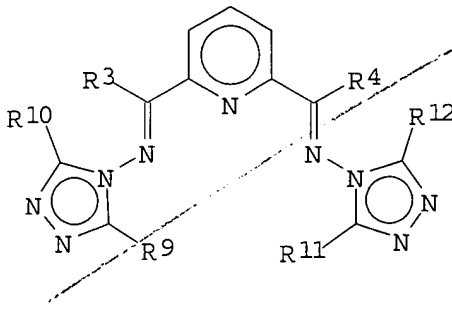
(Ia)



(Ib)



(Ic)



(Id)

triangle ≠ pyrrole radical donor

where

R^3, R^4 are, independently of one another, H or alkyl or aryl radicals, and

R^9, R^{10}, R^{11} and R^{12} are, independently of one another, C_1-C_6-alkyl radicals, and R`, R``, R```, R```` are H or alkyl, aryl or cycloalkyl radicals.

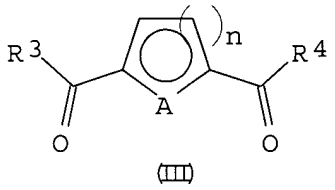
7. (currently amended) A process for preparing symmetrical compounds of the formula (I) of claim 1 in which $R^1 = R^2$ by reacting compounds of the formula (II)

$$H_2N\text{-}NR^5R^6 \qquad (II)$$

where

R^5 and R^6 together with the N atom form a ~~5-, 6- or 7-membered ring in which one or more of the -CH- or -CH_2- groups may be replaced by suitable heteroatom groups and which may be saturated or unsaturated and unsubstituted or substituted or fused with further carbacyclic or heterocarbacyclic 5- or 6-membered rings which may in turn be saturated or unsaturated and substituted or unsubstituted~~ a pyrrole radical or a radical derived from pyrrole substituted in the 2 and 5 positions by C_1-C_6-alkyl groups which may be linear, branched or substituted by heteroatoms, and/or by aryl groups which may be unsubstituted or in turn substituted by heteroatoms or C_1-C_6-alkyl groups which may be heteroatom-substituted,

with compounds of the formula (III)



(III)

where

R^3, R^4 are, independently of one another, H or alkyl, aryl or cycloaklyl radicals, and

A is ~~S, N, O~~ N or P, and,

n is 1 or 2, and

in a single-stage process under acidic reaction conditions in alcoholic solution or in the presence of a trialkylaluminum catalyst in an aprotic solvent in a mole ratio of the compound of the formula (II) to the compound of the formula (III) of 2:0.7-1.3.

8. (currently amended) A process for preparing unsymmetrical compounds of the formula (I) of claim 1 in which R^1 θ ≠ R^2 in a two-stage process in which

a) in a first step, compounds of the formula (II)

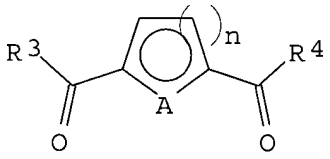
$$H_2N\text{-}NR^5R^6 \qquad (II)$$

where

R^5 and R^6 together with the N atom form a ~~5-, 6- or 7-membered ring in~~

~~which one or more of the -CH- or -CH_2- groups may be replaced by suitable heteroatom groups and which may be saturated or unsaturated and substituted or unsubstituted or fused with further carbacyclic or heterocarbacyclic 5- or 6-membered rings which may in turn be saturated or unsaturated and substituted or unsubstituted~~ pyrrole radical or a radical derived from pyrrole substituted in the 2 and 5 positions by C_1-C_6-alkyl groups which may be linear, branched or substituted by heteroatoms, and/or by aryl groups which may be unsubstituted or in turn substituted by heteroatoms or C_1-C_6-alkyl groups which may be heteroatom-substituted,

are reacted with compounds of the formula (III)



(III)

where

R^3, R^4 are, independently of one another, H or alkyl, aryl or cycloalkyl radicals, and

A is ~~S, N, O~~ N or P, and

n is 1 or 2,

in a mole ratio of the compounds of the formula (II) to the compounds of the formula (III) of 1:0.8-1.2 under acidic conditions in alcoholic solution to form the corresponding monoimine and the solvent is subsequently removed under reduced pressure,

and

b) the resulting monoimine is, in a second step, reacted with compounds of the formula (II) which differ from the compounds of the formula (II) used in step a), ~~or with compounds of the formula (IV)~~

~~$H_2N\text{-}RN^7R^8$ (IV)~~

~~where~~

~~R^7 and R^8 are, independently of one another, alkyl, aryl or cycloalkyl radicals,~~

~~or with amines of the formula (V)~~

~~$R^{13}\text{-}NH_2$ (V)~~

~~where~~

~~R^{13} is an alkyl, aryl or cycloalkyl radical,~~

in aprotic solution in the presence of a trialkylaluminum catalyst in a mole ratio of the monoimine to the compound of the formula (II) which differs from the compound of formula (II) used in step a), ~~(IV) or (V)~~ of 1:0.8-1.2.

9-18. (canceled)

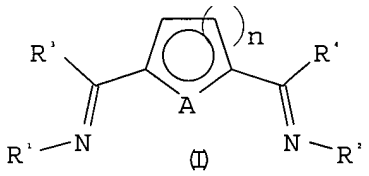
AMENDED/MARKED ABSTRACT

~~Catalysts for the polymerization of unsaturated compounds~~

~~Abstract~~

ABSTRACT OF THE DISCLOSURE

Bisimine compounds of the formula (I)



(I)

where the symbols are defined in the specification ~~have the following meanings:~~

~~A is a nonmetal selected from among N, S, O and P,~~

~~R^1 is a radical of the formula NR^5R^6,~~

~~R^2 is a radical of the formula NR^5R^6 or NR^7R^8, alkyl, aryl or cycloalkyl,~~

~~R^5 and R^6 together with the N atom form a 5-, 6- or 7-membered ring in which one or more of the -CH- or -CH_2- groups may be replaced by suitable heteroatom groups and which may be saturated or unsaturated and unsubstituted or substituted or be fused with further carbacyclic or heterocarbacyclic 5- or 6-membered rings which may in turn be saturated or unsaturated and substituted or unsubstituted, and~~

~~R^7 and R^8 are, independently of one another, alkyl, aryl or cycloalkyl radicals,~~

~~and~~

~~R^3, R^4 are, independently of one another, H or alkyl, aryl or cycloalkyl radicals,~~

~~and~~

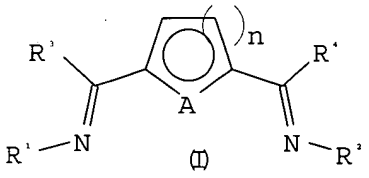
~~n is 1 or 2,~~

are used to prepare bisimidinato complexes which can be used in the polymerization of unsaturated compounds.

CLEAN AMENDED ABSTRACT

ABSTRACT OF THE DISCLOSURE

Bisimine compounds of the formula (I)



(I)

where the symbols are defined in the specification are used to prepare bisimidinato complexes which can be used in the polymerization of unsaturated compounds.